

# Testing Your Recall

name \_\_\_\_\_

date \_\_\_\_\_

1. Define the following terms:

a. Gravity

b. Mass

c. Weight

2. What things have gravity?

3. What is one way that you can demonstrate gravity here on Earth?

4. Why do some objects have more gravity than others?

5. Give two examples of things with a lot of mass.

6. Give two examples of things that have a small amount of gravity.

7. As the mass of an object increases, what happens to its gravity?

8. Why do you weigh less on the moon than you do on Earth?

9. Use the words gravity and mass to explain why you need to eat right and exercise to lose weight.



# Apply What You Learned

name \_\_\_\_\_

date \_\_\_\_\_

**Read the passage and complete the instructions below.**

Astronaut Sally Armstrong and her crew carried a precious cargo of gold to purchase energy resources from a mining base on Earth's moon. The deal was for 1,000 grams of gold, which is what the gold weighed (when measured on a scale) on Earth before it was loaded onto the spaceship.

When the miners on the moon received the gold, however, they claimed to have been cheated. The gold weighed only 166 grams on their scale. They won't deliver the energy resources until they receive full payment.

Astronaut Armstrong is caught in the middle. Both the miners and her bosses on Earth wonder if she stole the gold. She swears she didn't and that she delivered all the gold. She'd better get this problem figured out and fast.

**1. In your own words, describe the problem above.**

**2. Explain to the miners why the weight of the gold would be less on Earth's moon than could be on Earth.**

**3. Now, use the terms mass and weight to explain how no gold has been lost or stolen. You'll really convince the miners they aren't being cheated if you can explain how to measure the gold so it's the same on Earth and on the moon.**